

New York State Comptroller
THOMAS P. DiNAPOLI

Metropolitan Transportation Authority

Zero-Emission Bus Transition

August 2026 | Report 2024-S-37

Prepared by the Division of State Government Accountability

Audit Highlights

Objective

To determine whether the Metropolitan Transportation Authority (MTA) has taken steps to evaluate all significant issues (including cost, fire safety, technology, operations, facilities, training, and environmental justice) related to battery-electric bus deployment and included the results of its evaluations in its bus deployment plans. The audit covered the period from January 2019 through June 2025.

About the Program

The MTA has the largest bus fleet in the nation, operating 10% of all public transit buses in the United States and carrying 16% of the nation's bus passengers. Two MTA entities, New York City Transit and MTA Bus Company, provide bus service within the five boroughs of New York City out of 27 depots. In March 2026, there were 5,780 buses in the combined fleet.

In 2018, the MTA committed to transitioning its entire bus fleet and non-revenue vehicles to zero-emission vehicles by 2040. State Executive Order 22, issued in 2022, also stated that affected entities such as the MTA "shall have 100% of their light-duty non-emergency vehicle fleets be Zero Emission Vehicles (ZEVs) by 2035 and 100% of their medium and heavy-duty vehicle fleet be ZEVs by 2040."

MTA issued its Zero-Emission Transition Bus Plan (Plan) in 2022, and an updated plan in 2024. The 2024 Plan focused on three major areas for transition: fleet, facilities, and workforce. The MTA's transition strategy consists of four stages:

- Stage 1 – Learning at Scale
- Stage 2 – Expansion Challenge
- Stage 3 – Steady Growth
- Stage 4 – Final Push

The strategy aligns with MTA's 5-year capital planning process, with a focus on five goals: prioritizing environmental justice, having no impact on customer experience, limiting constraints on operations, reducing implementation costs and complexity, and empowering its workforce.

Regarding environmental justice, one of the MTA's identified benefits of transitioning the bus fleet to zero emission was that it would provide a direct air quality benefit to communities that experience disproportionate environmental risks or harms. To facilitate decision-making and prioritization for the zero-emission fleet rollout, the MTA developed an Environmental Justice Score that combines equity and air quality considerations to help ensure the communities that

are potentially the most impacted by emissions receive the benefits of the zero-emission bus rollout.

Per its 2024 Plan, the MTA intends to replace buses on a one-for-one basis with no increase in fleet size, and to have all new bus deliveries be zero emission by 2029. Through the four stages, MTA planned to increase its zero-emission bus (ZEB) purchases by 560, 1,000, 1,970, and 3,300, respectively. Most of the ZEBs purchased in the first two stages are expected to be battery-electric buses (BEBs). The MTA also plans to test hydrogen fuel cell electric buses to determine whether the technology will work on a larger scale in later stages.

The transition to ZEBs will require significant upgrades and modifications to depots, including improving the electrical infrastructure, adjusting existing equipment and structures, and expanding, reconstructing, and/or acquiring new facilities. Additionally, the transition introduces new risks, such as hazards associated with the use of high voltage and the risk of battery fires, which can be difficult to extinguish and can reignite.

According to the 2024 Plan, the MTA will provide all operating staff working at the depots where ZEBs are deployed with training on basic high-voltage safety and to generally familiarize them with the new buses and charging infrastructure. Additionally, all bus operators assigned to depots with BEBs and maintainers whose roles involve operating BEBs are to receive bus operation training and the latter will also receive specialized training on BEB maintenance.

Key Findings

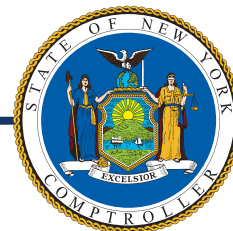
The MTA is at risk of not meeting its goals for transitioning to a zero-emission fleet by 2040 due to issues related to bus availability and reliability, slow updates to infrastructure, and environmental justice and safety priorities. Specifically:

- MTA has only one BEB manufacturer, which has limited capacity and a backlog of orders from the MTA and other customers.
- The 2024 Plan called for 485 buses to be delivered by the end of Stage 1. However, as of June 2025, the MTA had received only one bus. In addition, the MTA has reduced the number of buses ordered for Stage 2 from 1,000 to 500.
- The 75 buses deployed to date (the MTA received other BEBs through an earlier pilot program and Capital Plan) have had issues with reliability. The BEBs at five depots were only able to be put into service less than 60% of the time the MTA anticipated they would be in service. It is therefore unlikely that the MTA will be able to meet its goal to replace existing buses on a one-for-one basis. Rather, based on the equipment currently available, it would need to increase its fleet size and incur additional costs.
- Representatives of six public authorities (four in-state and two out-of-state) that we interviewed stated that they have experienced the same issues with BEB reliability and availability as the MTA.

- An MTA consultant noted in their report that additional power supply will be required for all the MTA's depots. However, BEB deployment issues have also delayed work, including the addition of battery-electric charging infrastructure and support for increased power supply at the depots, including those depots scheduled to receive new buses.
- While environmental justice is a stated priority, this was not clearly reflected in the transition plan's results. Buses were placed, without documented reasoning, in depots located in areas receiving lower Environmental Justice Scores than other depots in the same borough.
- While fire is a significant new risk with BEBs, the MTA's Office of System Safety officials were not involved in developing related safety plans and were not made aware of the project plans regarding fire detection, fire suppression systems, and emergency response plans.

Key Recommendations

- Develop a contingency plan to address the milestones that have not been met and the risk that the MTA will not be able to meet its goals.
- Evaluate available alternatives to improve range and performance and document the results.
- Re-evaluate the timeline for bus procurement and deployment for the next phase of the MTA's ZEB transition plan.
- Establish clear, measurable prioritization criteria and implement monitoring controls to ensure outcomes consistently align with stated priorities.
- Continue to work with the Office of System Safety and the New York City Fire Department to develop formal procedures for facility emergency response, fire suppression systems, and fire safety plans.



**Office of the New York State Comptroller
Division of State Government Accountability**

August 19, 2026

Janno Lieber
Chairman and Chief Executive Officer
Metropolitan Transportation Authority
2 Broadway
New York, NY 10004

Dear Mr. Lieber:

The Office of the State Comptroller is committed to helping State agencies, public authorities, and local government agencies manage their resources efficiently and effectively. By so doing, it provides accountability for the tax dollars spent to support government operations. The Comptroller oversees the fiscal affairs of State agencies, public authorities, and local government agencies, as well as their compliance with relevant statutes and their observance of good business practices. This fiscal oversight is accomplished, in part, through our audits, which identify opportunities for improving operations. Audits can also identify strategies for reducing costs and strengthening controls that are intended to safeguard assets.

Following is a report of our audit entitled *Zero-Emission Bus Transition*. This audit was performed pursuant to the State Comptroller's authority under Article X, Section 5 of the State Constitution and Section 2803 of the Public Authorities Law.

This audit's results and recommendations are resources for you to use in effectively managing your operations and in meeting the expectations of taxpayers. If you have any questions about this report, please feel free to contact us.

Respectfully submitted,

Division of State Government Accountability

Contents

Glossary of Terms	7
Background	8
Audit Findings and Recommendations	10
Zero-Emission Fleet Transition	11
Recommendations	14
Physical Improvements to Depots	14
Recommendation	15
Environmental Justice	16
Recommendation	17
Fire Safety	17
Recommendations	18
Training	19
Recommendations	20
Audit Objective, Scope, and Methodology	21
Statutory Requirements	22
Authority	22
Reporting Requirements	22
MTA Response and State Comptroller's Comments	23

Glossary of Terms

Term	Description	Identifier
MTA	Metropolitan Transportation Authority	<i>Auditee</i>
2022 Plan	MTA Zero-Emission Bus Transition Plan	<i>Key Term</i>
2024 Plan	MTA Zero-Emission Bus Transition Plan	<i>Key Term</i>
Articulated bus	A 60-foot-long bus that bends in the middle with capacity for up to 90 passengers. Articulated buses have 50% more capacity than a standard bus (which has a 60-passenger capacity).	<i>Key Term</i>
BEB	Battery-electric bus	<i>Key Term</i>
C&D	MTA Construction and Development	<i>MTA Agency</i>
CO ₂	Carbon dioxide	<i>Key Term</i>
FDNY	New York City Fire Department	<i>City Agency</i>
kW	Kilowatt	<i>Key Term</i>
NYCT	New York City Transit	<i>MTA Agency</i>
Pantograph chargers	Overhead chargers that connect to receptors on a bus roof	<i>Key Term</i>
ZEB	Zero-emission bus	<i>Key Term</i>

Background

The Metropolitan Transportation Authority (MTA) has the largest bus fleet in the nation, operating 10% of all public transit buses in the United States and carrying 16% of the nation's bus passengers. In 2024, two MTA entities, New York City Transit (NYCT) and MTA Bus Company, had average total ridership of 1,017,160 and 273,133 on weekdays, and 1,177,980 and 282,169 on weekends, respectively. The two entities provide bus service within the five boroughs of New York City out of 27 depots. In March 2026, there were a total of 5,780 buses in the combined fleet.

In 2018, the MTA committed to transitioning its entire bus fleet and non-revenue vehicles to zero-emission vehicles by 2040. State Executive Order 22, issued in 2022, also stated affected entities such as the MTA “shall have 100% of their light-duty non-emergency vehicle fleets be Zero Emission Vehicles (ZEVs) by 2035 and 100% of their medium and heavy-duty vehicle fleet be ZEVs by 2040.” Zero-emission buses (ZEBs) are large passenger vehicles whose primary propulsion and accessories (e.g., heat, lights, air conditioning, air compressors) produce zero carbon emissions in their day-to-day operations. These include battery-electric buses (BEBs) and hydrogen fuel cell electric buses. BEBs use electricity from lithium-ion batteries to power the bus and its accessories, while hydrogen fuel cell electric buses use hydrogen fuel mixed with oxygen to generate electricity and water. The electricity powers the bus and accessories.

MTA issued its Zero-Emission Bus Transition Plan in 2022 (2022 Plan) and an updated plan in 2024 (2024 Plan). The 2024 Plan focused on three major areas for transition: fleet, facilities, and workforce. The MTA's transition strategy consists of four stages, which align with the 5-year capital planning process (see the following table).

MTA 2024 Plan Alignment With 5-Year Capital Program

Stage	5-Year Capital Program
Stage 1 – Learning at Scale	2015–2019 and 2020–2024 Capital Programs
Stage 2 – Expansion Challenge	2025–2029 Capital Program
Stage 3 – Steady Growth	2030–2034 Capital Program
Stage 4 – Final Push	2035–2039 Capital Program

The transition strategy has a focus on five goals:

- Prioritizing environmental justice
- Having no impact on customer experience
- Limiting constraints on operations
- Reducing implementation costs and complexity
- Empowering its workforce

Per its 2024 Plan, the MTA intends to replace buses on a one-for-one basis with no increase in fleet size, and to have all new bus deliveries be zero emissions by 2029. Through the four stages, MTA planned to increase its ZEB purchases by 560, 1,000, 1,970, and 3,300, respectively. Although most purchases in the first two stages are expected to be BEBs, the MTA planned to test hydrogen fuel cell electric buses to determine whether the technology works on a larger scale in later stages.

The transition to ZEBs will require significant upgrades and modifications to the depots, including improving the electrical infrastructure, adjusting existing equipment and structures, and expanding, reconstructing, and/or acquiring new facilities. Moreover, the addition of BEBs introduces new risks, including high-voltage incidents and battery fires that the MTA must prepare for, especially because these fires can be difficult to put out and can reignite.

According to the 2024 Plan, the MTA will provide all operating staff working at depots where ZEBs are deployed with basic high-voltage safety training and general familiarization with the buses and the charging infrastructure. All bus operators assigned to depots with BEBs and maintainers whose role involves operating them will receive bus operation training. Maintainers will also receive specialized training on maintaining BEBs.

The MTA, according to the 2024 Plan, gained some experience with ZEBs in late 2017 through a 3-year pilot of 10 standard BEBs from two bus manufacturers: five from Manufacturer A operating out of Depot 1 and five from Manufacturer B operating out of Depot 2. Charging infrastructure, such as plug-in chargers and on-street pantograph chargers (overhead chargers that connect to receptors on the bus roof), was installed in the depots and on-route. The on-route charging installation involved lengthy negotiations with multiple City and State government agencies to secure permission and design approval. The pilot for Manufacturer A was completed in June 2021, with over 90,000 miles in service and 172 tons of carbon dioxide (CO₂) emissions avoided. The pilot for Manufacturer B was completed in December 2021, with over 145,000 miles in service and 300 tons of CO₂ emissions avoided.

In 2019, the MTA made its first non-pilot purchase of 60-foot articulated BEBs, ordering 15 buses from Manufacturer A, and began operation in January 2020 (articulated buses are 60-foot-long buses that bend in the middle with capacity for up to 90 passengers). Articulated buses have 50% more capacity than standard buses, which have a 60-passenger capacity. As part of the 2015–2019 Capital Program, the MTA purchased an additional 60 40-foot BEBs from Manufacturer A, which were put into operation in 2024 and 2025. The MTA also purchased 470 BEBs from Manufacturer A as part of the 2020–2024 Capital Program.

Audit Findings and Recommendations

The MTA faces significant challenges to achieving its goal of a zero-emission fleet by 2040 and is at risk of not meeting the goals of its zero-emission bus transition plans.

As of June 2025, the MTA had only one BEB manufacturer that met its standards, with limited capacity and a backlog of orders from the MTA and other customers. The 2024 Plan called for 485 of the next 500 buses to be delivered by the end of Stage 1, but as of June 2025, the MTA had received only one bus. In addition, the MTA has reduced the number of buses for Stage 2 of the program from 1,000 to 500.

As of the 2024 Plan, the cost of a BEB had increased and was approximately 60% more expensive than a diesel bus, and the BEBs the MTA has put into service (through earlier pilots and capital plan funding) have a much higher failure rate and lower availability and require more time to diagnose and fix than the MTA's other buses. We found that the BEBs were, on average, placed on shorter routes and in service less frequently than initially anticipated due to issues with reliability and charging.

To support ZEB deployment and its transition plans, upgrades to MTA facilities are needed. However, bus procurement reductions have caused the MTA to pause work on the depots, including work to upgrade them to meet increased power needs. As a result of the aforementioned issues, it is unlikely that the MTA will be able to meet its plan to replace existing buses on a one-for-one basis and will need to increase its fleet size and incur additional costs.

The MTA has also not adequately demonstrated how it prioritized environmental justice in the deployment of the 60 BEBs delivered in 2024 and 2025. There is a lack of documentation showing how environmental considerations influenced the depots where 470 buses purchased as part of Stage 1 will be placed, with areas ranking higher in their environmental justice needs not receiving the BEBs while areas ranking lower did.

While the MTA has conducted safety planning to address the risk of battery fires posed by the new BEBs, our review found that officials from the Office of System Safety were not involved in developing the plans and were unaware of critical project details regarding detection, suppression, and emergency response related to this specific risk.

Additionally, we found insufficient documentation showing 21 bus operators and one maintainer who required BEB operation training had completed such training. The attendance sheets we reviewed revealed discrepancies, with training completion dates that did not match other MTA records for 49 bus operators. Additionally, we noted that bus operators had not received high-voltage awareness training, and 19 of 35 maintainers also lacked this essential training.

Zero-Emission Fleet Transition

The MTA intends to replace buses on a one-for-one basis with no increase in fleet size. According to the 2024 Plan, the MTA will progressively transition its bus fleet to 100% zero emission by 2040 over four stages through BEB purchases of 560, 1,000, 1,970, and 3,300, respectively. Because buses have a useful life of 12 years, 2028 should be the last year the MTA receives deliveries for non-BEBs in order for the MTA to meet its 2040 goal of 100% zero emission. All new bus deliveries from 2029 on will have to be zero emission.

Available BEB manufacturers and models must meet distance-per-charge expectations as well as the MTA's standards for high-intensity passenger use, stop-and-go operations, cold weather, and rough roads. Based on the 2024 Plan, the MTA intends to expand the pool of viable vendors and models and to proactively work with willing vendors to encourage bus development and improvement. The 2024 Plan is focused on BEBs, but the MTA is also looking into fuel cell electric bus technology, such as hydrogen fuel cell electric buses.

Acquisition and Vehicle Cost

The MTA has contracted with Manufacturer A, which is the only source of BEBs that meet the MTA's standards. Manufacturer A has provided 75 buses: the first 15 were delivered in 2019 and 2020 and the other 60 were delivered during 2024–2025. The 2024 Plan called for 485 of the next 500 buses to be delivered by the end of Stage 1. However, as of June 2025, the MTA had received only one bus. In addition, we were advised that the MTA reduced the number of buses for Stage 2 of the plan from 1,000 to 500.

In its recent announcements, Manufacturer A's parent company revealed that for Fiscal Year 2023, it delivered 4,001 new buses, of which 878 (22%) were ZEBs. In the 4th quarter report for Fiscal Year 2024, the company indicated that 1,036 of 4,547 new bus deliveries (23%) were ZEBs. While the increase in ZEB production is encouraging, it's worth noting that only a portion of the overall output consists of ZEBs. The documents also highlighted significant backlogs, with 3,811 units unfulfilled for 2023 and 6,099 for 2024. It's also important to mention that the MTA is not this manufacturer's only customer.

In addition to supply issues, BEBs cost more than traditional diesel buses. According to the 2022 Plan, the estimated capital costs for a 40-foot standard diesel bus and a 60-foot articulated diesel bus were \$635,000 and \$835,000, respectively. In comparison, a 40-foot standard BEB cost \$1,033,000, while the price for a 60-foot articulated BEB was \$1,388,000, representing a difference of approximately 60% compared to diesel buses. By 2024, the estimated capital costs for these vehicles were projected to rise to \$1.4 million for a 40-foot standard BEB and \$1.83 million for a 60-foot articulated BEB. The 2024 Plan estimates that the total capital cost for transitioning to a 100% ZEB fleet would be \$11.9 billion.

Further, the standard warranty on a lithium-ion battery pack and energy storage system in the transit industry is 6 years. However, according to a report produced by a contracted engineering firm, a BEB's life expectancy is 12 years or 500,000 miles. This can result in the MTA paying the cost of repairs or replacements for failure after the warranty expires.

Reliability Issues With Buses and Chargers

In the 2024 Plan, the MTA noted that it has been experiencing reliability issues with both the BEBs and chargers and faces challenges with the buses' range (the distance a bus can travel on a single charge). According to the 2024 Plan, BEBs have a much higher failure rate, lower availability, and require more time to diagnose and fix than the MTA's existing fleet. We interviewed MTA officials, and they stated that, with the current battery technology, the BEBs do not last as long in service as diesel buses. The battery needs to be at least 70% charged for the bus to be deployed for service and must return to the depot when it is at 30%. As a result, the BEBs are usually assigned to shorter trips, and cold and hot weather can further reduce the range of these buses. The MTA's consultant also expressed concern that extreme conditions can stress the batteries, causing irreversible degradation and damage. The MTA is also experiencing similar challenges with the chargers, including regular communication failures and long downtimes. On-route chargers could increase the time BEBs can remain in service, but MTA officials stated they will not be installing them due to the time required to obtain permits.

Depot officials also expressed concerns about the reliability of the BEBs. During our site visit at Depot 1, 21 of 32 BEBs had been out of service an average of 18 days. At Depot 2, 17 of 28 BEBs were out of service for an average of 23 days. Five were out of service due to an issue with the interlock system, which caused the wheelchair ramps to activate while the bus was in motion. At Depot 3, we found one BEB was out of service for 23 days and was at the vendor for a modification to the charging system. At Depot 4, one BEB was out of service for 3 days because it was not charging. We requested out-of-service reports at Depot 5 and were advised by depot officials that the report was not used.

Operations

We reviewed the performance records of the 75 non-pilot BEBs assigned to five depots from March 2024 through June 2025, using the Pull-out/Pull-in sheets depot officials used to prepare and deploy buses for service. Based on our review, we found BEBs were placed on shorter routes and were not put into service as frequently as anticipated.

- The first day of Pull-out/Pull-in sheets for the 15 60-foot articulated BEBs at Depot 1 started April 1, 2024. We found they operated for approximately 152 days and were scheduled for 223 trips, each about 8.5 hours long. From the first day each BEB operated out of the depot to June 12, 2025, the 15 buses were placed in service on average less than 40% of the time. Meanwhile, the 17 40-foot standard BEBs, on average, operated on approximately 120 days and were scheduled for 207 trips, each about 6.5 hours. The 17 BEBs were put into service, on average, 56% of the time.
- Only nine of the 28 BEBs assigned to Depot 2 had records of a Pull-out/Pull-in from March 2024 to July 2024. The nine BEBs, on average, operated for 7 days and were scheduled for about 16 trips, each lasting only 4 hours.
- The four BEBs assigned to Depot 3 operated for about 116 days and were scheduled for 211 trips, each about 4 hours long. From the first day of Pull-out/Pull-in sheets for the four

BEBs operated out of the depot, they were only put into service, on average, 50% of the time.

- The Pull-out/Pull-in sheet for the BEBs operated from Depot 4 did not have enough information for our review.
- The three BEBs assigned to Depot 5 operated for about 109 days and were scheduled for 205 trips, each lasting about 4 hours. From the first day each bus operated out of the depot during the sampled period, it was put into service only about 42% of the time.

According to MTA officials, the bus operators need to switch vehicles more frequently, which leads to delays. BEBs have a range of about 90 miles and are recharged daily. By comparison, a 40-foot diesel bus has a fuel tank capacity of 144 gallons, a range of nearly 570 miles, and can operate for about 45 hours before needing refueling.

Other Public Authorities

We interviewed representatives of six public authorities (four in-state and two out-of-state) regarding their experience with BEBs. They advised us that they have experienced the same issues with reliability and availability that we found at the MTA. In addition, one public authority indicated that the charging speed and amount of time it takes to charge BEBs affect bus operations. It also indicated that, despite its charger being able to charge at 450 kW, the BEBs it purchased from a different manufacturer can only charge at 350 kW due to a battery pack limitation. The public authority indicated that, to optimize operations, it does not fully charge BEBs because it would take an additional 45 minutes. With a 125 kW slow charger, the BEBs would take 3–4 hours to charge. Additionally, three of the six public authorities indicated that the BEBs must return to the depot when the charge level is at 30%, making it difficult for them to operate for long. To resolve issues with BEB range and performance, two public authorities are installing on-route chargers.

Three authorities expressed that the BEBs from Bus Manufacturer A have proven to be:

- Unreliable and often sidelined due to maintenance problems.
- Likely to face recalls due to battery issues that affected half of its BEB fleet.
- Likely to experience issues with sensors that detect increases in battery temperature.

During a meeting on December 8, 2025, MTA officials stated that they provided six recommendations to their manufacturer of ZEBs with a view toward improving quality control as follows:

- Real-World In-Service Testing via Over-the-Road Delivery
- Enforce Liquidated Damages (LDs) for Downtime
- Set Strict Limits on Pre-Delivery Inspection (PDI) Duration
- Expand Localized Technical Support

- On-Site Engineering Support at PDI to prevent long delays in troubleshooting and repairs
- Adopt Advanced Real-Time Monitoring Systems

In response to our preliminary findings, MTA officials agreed with the recommendations to develop uniform procedures to track ZEB transition progress and a contingency plan to address the possibility that the MTA will be unable to meet the one-for-one basis replacement goal. They disagreed with re-evaluating the decision to use on-route chargers. MTA officials stated that, based on their previous analysis, “the currently available on-route charging solutions are cost-prohibitive given their deployment requirements” and “associated permitting processes with the City and relevant agencies do not align with the timeline.” However, they did not provide documentation to support their response.

In light of the delays and limited number of BEBs delivered as of March 3, 2026, the MTA needs to take steps to authorize a new plan to address the change in conditions impacting ZEB transition plan implementation.

Recommendations

1. Develop a contingency plan to address the milestones that have not been met and the risk that the MTA will not be able to meet its goals.
2. Evaluate available alternatives to improve range and performance and document the results.

Physical Improvements to Depots

The transition to ZEBs will require significant upgrades and modifications, such as improvements to the existing electrical infrastructure; adjustments to existing equipment and structures; and potential expansion, reconstruction, or acquisition of new facilities. The MTA’s 2024 Plan states that a preliminary review was completed for all 27 of the MTA’s depot facilities based on four characteristics (general condition, electrical, space, and ceiling height) related to the feasibility and effort required to install battery-electric charging infrastructure and to support a new power supply. Each depot facility was rated good (minimal foreseeable issues), moderate (some level of modification expected), or constrained (significant constructability or feasibility challenges).

For general conditions, MTA officials identified which depots may expect significant modifications based on their age and overall condition. They also identified which depots will require major expansion and upgrades to the electric distribution room and other electrical infrastructure to support charging infrastructure installation. For space and ceiling height, the MTA identified depots where parking capacity or existing space utilization may make the addition of new infrastructure and the formalization of parking assignments challenging, and depots where there may be challenges with installing overhead pantograph chargers due to ceiling height. The results of their preliminary evaluation showed that seven depots were constrained for general condition, 10 for electrical, 15 for space, four for ceiling height, and 12 for two or more characteristics.

Depot Evaluation

The MTA's consultant prepared a summary report covering their bus depot evaluation, which focused on the feasibility of installing the required charging infrastructure for 100% BEB operation. The consultant's report noted that additional power supply will also be required for all the depots and recommended proper installation of outdoor chargers, protection to cover the charging infrastructure from inclement weather, a heating system for the pantograph chargers to prevent snow or ice accumulation, and regular insulation inspections at the depots.

Although Phase 1 of the evaluation is complete, Phase 2 had not yet been completed as of November 2025. According to MTA Construction and Development (C&D) officials we interviewed, the MTA is focused on working on the depots that can structurally support BEBs.

C&D officials stated that Phase 2 of the depot evaluation has been paused due to a cut in bus procurement, but they will work on depots that are in a state of good repair as the BEBs are added to the fleet. The Amended Customer Project Commitment Phase 2 document MTA officials provided shows that the planned work for installing pantograph bus chargers at the two depots that will receive the next 470 BEBs was removed. We also requested load letters for the installation of a new power supply to the depots. A load letter is provided to delineate a customer's expected electricity demand and is used by the utility to assess capacity, plan infrastructure, and approve service connections. We were provided with load letters for the installation of a new supply for only six depots. This did not include the four depots that currently had BEBs assigned to them.

For Phase 1, NYCT's Department of Buses worked on charger installations at three bus depots where BEBs are assigned. For Phase 2, C&D worked on replacing the chargers at one depot with BEBs and installing chargers at two depots that are expected to be used for future deployments.

During our visit to Depot 3, which is currently deploying BEBs, we were advised that the depot could not supply sufficient power to the plug-in chargers, resulting in the charger output being lowered to 50 kW, meaning it could only charge one bus at a time. In addition, the Structural Condition Survey and Inspection report for the depot's Bus Depot Annex Building indicated that the elevated slab and ramp need to be repaired to safely operate the current bus fleet, and the structure would need localized strengthening to safely operate the future bus fleet.

In response to our preliminary findings, MTA officials agreed with our recommendation and stated the timeline for the next phase of the ZEB transition plan is being re-evaluated, and procurement and deployment schedules are being recalibrated based on demonstrated vehicle reliability rather than contract delivery dates. The revised procurement and deployment timeline will be issued with the updated transition plan.

Recommendation

3. Re-evaluate the timeline for bus procurement and deployment for the next phase of the MTA's ZEB transition plan.

Environmental Justice

According to the 2024 Plan, the MTA's buses serve a disproportionate share of low-income and minority communities compared to other modes of transportation. One of the MTA's identified benefits of transitioning the bus fleet to zero emission was that it would provide a direct air quality benefit to these traditionally disadvantaged communities. As part of both the 2022 and 2024 Plans, the MTA emphasized its commitment to prioritizing environmental justice in its transition to a 100% zero-emission bus fleet. It is the first zero-emission transition strategy goal and the first of five criteria in the selection of sites for its infrastructure phasing and bus deployment plan. Other criteria include borough distribution, power supply, and construction and schedule feasibility. To facilitate decision-making and prioritization for a zero-emission fleet rollout, the MTA developed an Environmental Justice Score, a composite of the Areas of Concentrated Need and the Air Quality Index, that combines equity and air quality considerations to help ensure that communities that are potentially the most impacted by emissions receive the benefits of the ZEB rollout.

For the first 15 buses, environmental justice was not used because the buses were delivered prior to either Plan. Of the 60 buses that arrived in 2024–2025, 45 buses were placed in two depots even though their Environmental Justice Score by borough rank was lower than the other depots in their borough. One depot was ranked last of the four depots in Manhattan in both the 2022 and 2024 Plans, while the other depot ranked fifth of six depots in Brooklyn in the 2022 Plan and fourth in the 2024 Plan. We interviewed MTA environmental justice officials about why the first two depots were selected for initial bus deployment, and they stated that the deployment strategies were decided by leadership at NYCT's Department of Buses and C&D.

For the first phase of deployment of the 470 BEBs, locations were selected in part to prioritize environmental justice and cover all five boroughs, with at least two depots in each borough receiving buses. The MTA selected 11 depots for the deployment of the 470 BEBs, but the proposed allocation did not always match the environmental justice ranking. Although Stage 2 of the 2024 Plan indicated that deployment locations will continue to be driven by Environmental Justice Scores, we found it was unclear how the scores influenced certain placements. For example, in Phase 2, the depot ranked first in Manhattan for environmental justice was replaced by depots ranked eighth in Queens and third in the Bronx.

In addition, we inquired as to whether the MTA has generated any new environmental justice results after observing the use of BEBs compared to diesel buses. MTA Environmental Justice officials stated that they hadn't checked yet, as they only had 75 BEBs at the time and needed a higher volume of BEBs running to get a pure electric reading. In its 2024 Plan, the MTA noted that the five pilot BEBs from one manufacturer completed in June 2021 operated over 90,000 miles in service and avoided 172 tons of CO₂ emissions. The five pilot BEBs from another manufacturer completed in December 2021 operated over 145,000 miles in service and avoided 300 tons of CO₂ emissions.

In response to our preliminary findings, MTA officials stated, “The rationale for these decisions is reflected in the multi-criteria framework, which explains why certain locations may be elected ahead of others despite their EJ [environmental justice] Scores.” The MTA also stated that Phase 2 depot and route assignments must also account for operational feasibility, including power availability, facility readiness, fleet requirements, and schedule constraints. However, MTA officials have not provided the multi-criteria framework or supporting documentation.

Recommendation

4. Establish clear, measurable prioritization criteria and implement monitoring controls to ensure outcomes consistently align with stated priorities.

Fire Safety

Battery fires are a new safety risk related to BEBs. Because these buses use lithium-ion batteries, any fires can be difficult to put out. Reducing the likelihood of a fire, providing early detection and warning systems, and being prepared for and responding quickly and effectively to an incident are all critical steps for reducing the risk and impact of battery fires. Consequently, the MTA's 2024 Plan recognizes the need for a partnership with the New York City Fire Department (FDNY) for preparation and incident response.

The MTA's Office of System Safety serves as the liaison between the MTA and emergency responders, such as FDNY. The 2024 Plan calls for further engagement through a joint working group with FDNY on battery fire safety to develop standards for fire suppression equipment and incident response protocols. To achieve this and to serve as a liaison between emergency responders, the Office of System Safety should be actively involved in developing incident response protocols with FDNY.

We interviewed Office of System Safety officials, who indicated they were not involved with developing the 2024 Plan and were not made aware of the project plans regarding detection, suppression, and emergency response. They stated that they should be included in the evacuation and planning process for dealing with a thermal event (e.g., a battery overheating or the bus indicators indicating something is not functioning correctly) and that it is the project manager's responsibility to bring any safety issues to their attention. Office of System Safety officials were only given a general understanding of what the ZEB transition plan would be doing and had provided their areas of concern but were not actively involved with the ZEB transition plan after the initial hazard analysis. The ZEB transition plan sought a third-party safety review, but the Office of System Safety was not provided with the information. Office of System Safety officials also raised concerns about how BEBs were stored and how a fire could spread to surrounding areas and buses, also affecting depot staff. According to FDNY, putting out a battery fire is difficult, as the batteries are well-protected and can reignite. As such, the Office of System Safety did not want the BEBs to be charged inside the depots.

We visited the five depots with BEBs to interview officials and observe fire safety preparations at each. During our depot observations, we noticed that the buses were parked close together and there was no clear path for them to leave the depot in the event of a fire. Current depot procedure in the event of a fire is to move the bus to a designated location isolated from the depot.

At two depots (2 and 5), we requested written emergency response plans to assess whether they had been updated to include procedures for the new BEBs. At Depot 2, officials provided an outdated facility emergency response plan and did not include procedures for BEBs. At Depot 5, officials provided us with the Emergency Action & Fire Prevention Plan, which had been updated with fire safety information on BEBs and also contained information on, in the event of high temperatures, who is assigned the responsibility for relocating a BEB. However, the plan did not have updated procedures for the new isolation zone for electric bus fires, as depot officials were still working on making changes to the isolation zone.

During our visit to Depot 4, we were informed that the depot did not have a functioning fire suppression system. Instead, several staff were assigned the role of fire safety watch, where they walk around the depot to check for smoke. In addition, depot officials stated that, due to the location of the depot, it occasionally floods and would also flood where the chargers are installed. Officials at Depot 4 expressed their flood safety concerns given the locations of the chargers.

At Depot 1, we were advised the batteries on the BEBs are monitored for conditions such as heat and, if the bus starts to overheat, they receive an alert. If depot personnel determine it is a thermal event, the bus is moved outside of the building and observed. Personnel at Depot 3 also advised us that if a BEB starts to overheat, it is moved outside the depot to a designated area and observed.

In response to our preliminary findings, MTA officials agreed and indicated that bus management has collaborated with the Office of System Safety on recent FDNY depot site visits and will continue to update each location's existing Emergency Action Plan and post it at each depot location. MTA officials also agreed with the dissemination of ZEB fire safety guidance and indicated that alert systems are in place at BEB locations to notify managers of emergencies and maintenance directives. In addition, permanent bulletins are posted on the MTA's intranet, which will be redistributed to depot personnel as a reminder. Depot management will also provide safety awareness meetings, fire drills, and other routine communication channels to ensure all staff are informed and prepared.

Recommendations

5. Continue to work with the Office of System Safety and FDNY to develop formal procedures for facility emergency response, fire suppression systems, and fire safety plans.
6. Ensure that all guidance for fire safety regarding ZEBs is disseminated to all personnel, depots, and emergency responders.

Training

The 2024 Plan outlines the need to transition the MTA's workforce to adapt to the continuously changing landscape of zero-emission technology. It identifies safety, operations, and maintenance as major areas in which ZEBs will change the workforce. Because electric bus batteries and charging equipment involve high voltage, depot staff will need awareness and safety training.

According to the 2024 Plan, the MTA will provide all operating staff working at the depots where ZEBs are deployed with basic high-voltage safety training and general familiarization with buses and the charging infrastructure. The MTA will also provide specialized training for bus maintainers on electric bus maintenance, electrical diagnostics and testing, and working inside battery units. Training is provided by both the MTA's Zerega Bus Maintenance and Training Facility and the bus manufacturer. The Zerega facility keeps attendance sheets from the provided training. Depot officials stated that older documents are stored at an off-site storage facility. We reviewed records of bus operators and maintainers to determine whether they received the required BEB training. We compared the records for bus operation training, tracked in the MTA's Uniform Timekeeping System, and high-voltage awareness training, tracked in the Enterprise Learning Management System, with signed attendance sheets. We selected a sample of 247 bus operators and 35 maintainers operating out of five depots where BEBs were deployed.

Bus Operation Training

To familiarize all BEB drivers and maintainers, NYCT Department of Buses and the MTA Bus Company require bus operation training. Training consists of a classroom orientation on start-up and shutdown procedures, guidance on responding to battery system issues, and emergency protocols as well as hands-on experience driving an electric bus and procedures for maintainers.

We found that there were no attendance sheets to support that 53 of the 247 bus operators and one of the 35 maintainers received the bus operation training. For the attendance sheets that we did find, the training completion dates did not match the date in the MTA's timekeeping system for 49 bus operators.

In response to our preliminary findings, MTA officials provided attendance sheets for 38 of the 53 bus operators for whom we found had none. However, MTA officials did not provide sufficient documentation to support that 21 bus operators (15 had no attendance sheet and six had attendance sheets for another course) and one maintainer received bus operation training.

Bus Maintainers

Zerega facility officials require maintainers (helpers and above) to take high-voltage awareness training. To determine whether maintainers completed this required training, we selected a judgmental sample of 35 maintainers and found that 19 did not receive the training.

Despite the 2024 Plan's goal to provide high-voltage safety training to all operating staff working at depots where ZEBs are deployed, Zerega facility officials stated that bus operators do not receive high-voltage awareness training.

In response to our preliminary findings, MTA officials acknowledged our recommendations and stated that "considering the annual pick process [a seniority-based system where staff with more years in the company select their work schedules, locations, and days off], some employees who have not yet received training may transfer into depots with BEBs. In such cases, depot management is required to coordinate with the training school to ensure the required instruction is provided." MTA officials also stated that, because the majority of the fleet is still diesel or hybrid buses, "it is not operationally urgent to train all maintainers in system-wide and high-voltage awareness at this time." Maintainers who did not receive training in high-voltage systems or electric bus operations are not authorized to perform work on or operate BEBs.

Recommendations

7. Provide all bus operators and maintainers with the required training.
8. Develop a uniform system for preparing, maintaining, and retaining training documentation.

Audit Objective, Scope, and Methodology

The objective of our audit was to determine whether the MTA has taken steps to evaluate all significant issues (including cost, fire safety, technology, operations, facilities, training, and environmental justice) related to battery-electric bus deployment and included the results of its evaluations in its bus deployment plans. The audit covered the period from January 2019 through June 2025.

To accomplish our objective and assess related internal controls, we interviewed ZEB transition plan management and bus depot personnel, and Zerega facility, Office of System Safety, and FDNY officials. We also interviewed representatives at six public authorities about their experience with BEBs. We reviewed Pull-out/Pull-in Sheets, ZEB training records for bus operators and maintainers, and MTA policies and procedures. We also visited five bus depots.

We used a non-statistical sampling approach to provide conclusions on our audit objectives and to test internal controls and compliance. We selected random samples. However, because we used a non-statistical sampling approach for our tests, we cannot project the results to the respective populations, even for the random samples. Our samples, which are discussed in detail in the body of our report, include:

- A total of 247 of 2,470 bus operators randomly selected from each of the five depots to test whether they had attended required BEB bus operation training.
- A total of 20 of 52 bus maintainers randomly selected from the two depots with at least 10 bus maintainers and all the bus maintainers from three depots with fewer than 10, for a total of 35 bus maintainers to test whether they had attended required BEB bus operation training and high voltage awareness training.

We obtained data from the Uniform Timekeeping System and the Enterprise Learning Management System and assessed the reliability of that data by reviewing existing information, interviewing officials knowledgeable about the system, performing electronic testing, and tracing to and from source data. We determined that the data from these systems was sufficiently reliable for the purposes of this report.

Statutory Requirements

Authority

The audit was performed pursuant to the State Comptroller's authority as set forth in Article X, Section 5, of the State Constitution and Section 2803 of the Public Authorities Law.

We conducted our performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective.

In addition to being the State Auditor, the Comptroller performs certain other constitutionally and statutorily mandated duties as the chief fiscal officer of New York State, including some duties on behalf of public authorities. For the MTA, these include reporting the MTA as a discrete component unit in the State's financial statements and approving selected contracts. These duties could be considered management functions for the purposes of evaluating organizational independence under generally accepted government auditing standards. In our professional judgment, these duties do not affect our ability to conduct this independent audit of the MTA's oversight and administration of the zero-emission bus transition.

Reporting Requirements

We provided a draft copy of this report to MTA officials for their review and comment. In response to our draft report, MTA officials agreed with or acknowledged the value of the report's recommendations. Their comments were considered in preparing this final report and are attached in their entirety at the end of it, excluding load letters and drawings. Our responses to certain MTA comments are embedded in the MTA's response as State Comptroller's Comments.

Within 180 days after final release of this report, as required by Section 170 of the Executive Law, the Chairman and Executive Director of the Metropolitan Transportation Authority shall report to the Governor, the State Comptroller, and the leaders of the Legislature and fiscal committees, advising what steps were taken to implement the recommendations contained herein, and where recommendations were not implemented, the reasons why.

MTA Response and State Comptroller's Comments

2 Broadway
New York, NY 10004
212 878-7000 Tel

Janno Lieber
Chairman and Chief Executive Officer



Metropolitan Transportation Authority
State of New York

June 12, 2026

VIA E-MAIL

Ms. Carmen Maldonado
Audit Director
The Office of the State Comptroller
Division of State Government Accountability
59 Maiden Lane, 21st Floor
New York, NY 10038

Re: Draft Report #2024-S-37 (Zero Emission Bus Transition)

Dear Ms. Maldonado:

This is in reply to your letter requesting a response to the above-referenced draft report.

I have attached for your information the comments of Demetrius Crichlow, President, MTA New York City Transit.

Sincerely,

A handwritten signature in blue ink, appearing to read "Janno Lieber".

Janno Lieber

c: Juliette Michaelson, MTA Chief of Staff
Monica Murray, Auditor General, MTA Audit Services

2 Broadway
New York, NY 10004
646-252-5800
646-252-5815 Fax

Demetrius Crichlow
President



June 11, 2026

VIA E-MAIL

Janno Lieber
Chair and Chief Executive Officer
Metropolitan Transportation Authority
2 Broadway, 20th Floor
New York, NY 10004

**Re: MTA Response to the Office of the New York State Comptroller Audit
Zero-Emission Bus Transition 2024-S-27**

Dear Chair Lieber,

This is in response to the Office of the New York State Comptroller draft report to the MTA on the **Zero-Emission Bus (“ZEB”) Transition, 2024-S-37**.

As you are aware, public transit in every respect is critical to combat climate change, and the MTA has long been committed to achieving a zero-emissions fleet in alignment with New York State’s carbon reduction goals. And yet, the challenges surrounding Battery Electric Buses (“BEB”) technology are neither new nor unforeseen. For years, both the State and the MTA have acknowledged the industrywide constraints that limit BEB deployment as well as raised concerns about BEB performance. We’ve also openly discussed their implications for meeting both the state’s and MTA’s 2040 target. The MTA has repeatedly and publicly identified these issues—through Board presentations, formal reports, and internal planning—and has consistently advanced strategies to address them. These concerns have been well documented and regularly communicated. It is therefore somewhat confusing that the OSC draft report ignores all of this background in its examination of these issues.

State Comptroller’s Comment – It is unclear why the MTA is confused, as we have consistently communicated to them that comments will be included in the final report only when accompanied by sufficient supporting documentation to validate the claims made. Our report clearly indicates that the MTA is at risk of failing to meet its goal of transitioning to a zero-emission fleet by 2040 due to issues with bus availability and reliability. Additionally, we found that the costs will exceed the amounts outlined in the 2024 Plan. During our audit

fieldwork, we asked whether the MTA had an alternative plan to address the shortage of BEBs and the decision to pause the purchase of approximately 470 buses and the necessary improvements to bus depots. However, despite claims of having extensive documentation, we did not receive sufficient supporting documents.

Our team has carefully reviewed each of the audit's observations and recommendations. While some findings reflect circumstances or constraints beyond our direct control, we continue to take all reasonable steps within our authority to address the issues raised and to collaborate with our partners to support effective long-term solutions. The following response outlines our position on each finding and the actions we will take moving forward.

As a point of clarification, the statement made about our provision of load letters was inaccurate, Kingsbridge Depot does not currently require a load letter as the "BEB" on property are being charged via temporary chargers or at another bus depot. MJ Quill Depot is currently not charging at full capacity and therefore a load letter would not be required until reaching Phase 3C, which we are actively monitoring. Finally, we have attached the load letter from Charleston Depot and the ruling for Grand Avenue.

State Comptroller's Comment – MTA officials replied that a load letter was "currently" not required for Kingsbridge (because the buses are not charging on the property). However, they provided load letters for three other depots that also did not have any BEBs at the time of our request (Ulmer Park, Tuskegee Airmen, and Gun Hill). MTA information that is available to the general public indicates that load letters should be prepared in advance to ensure the utility company can provide the power required for residential and commercial users.

Recommendations:

OSC Recommendation #1: Develop a contingency plan to address the milestones that have not been met and the risk that the MTA will not be able to meet its goals.

MTA's Response: The MTA acknowledges this recommendation. The MTA is already undertaking a targeted assessment of key assumptions and implementation strategies, including a comprehensive review of deployment targets, procurement schedules, depot sequencing and deployment assumptions based on demonstrated vehicle performance, infrastructure readiness, utility coordination timelines, and lessons learned during initial deployment. See June 23, 2026, Board presentation at 1:14:37: [MTA Board - Capital Program Committee Meeting - 6/23/2025 - YouTube](#)

These updates will be reflected in the updated MTA ZEB transition plan and are designed to provide the flexibility and accountability expected of a contingency planning process.

OSC Recommendation #2: Evaluate available alternatives to improve range and performance and document the results.

MTA's Response: The MTA agrees with this recommendation. The MTA is actively evaluating alternative technologies and working with bus manufacturers to improve vehicle range, performance, and overall, zero-emission readiness. This includes completing the testing and evaluation process for newer battery systems and documenting measurable improvements in range, battery efficiency, and the ability of zero-emission buses to meet the MBDF and established availability targets.

In addition, the MTA is assessing pilot opportunities for alternative zero-emission propulsion systems, including hydrogen fuel cell technologies, to determine their potential role in future fleet deployment. See

OSC Recommendation #3: Re-evaluate the timeline for bus procurement and deployment for the next phase of the MTA's ZEB transition plan.

MTA's Response: The MTA agrees with this recommendation. The MTA is reassessing its bus procurement and deployment timeline as part of the ongoing update to the Zero Emission Transition Plan. Schedule adjustments will reflect industry-wide constraints, including the maturity and reliability of BEB technology, domestic manufacturing capacity, and evolving performance and safety standards.

As the largest domestic purchaser of ZEBs, the MTA plays a central role in sustaining the supplier base and driving performance standards comparable to conventional buses. We have two primary strategies in this regard. First, the MTA's engagement with the industry and supply chain is critical as manufacturers resolve reliability concerns. In this period of industry maturation, the MTA is committed to working with manufacturers through pilot testing, structured feedback, opportunities to resolve issues, and delivery schedule adjustments that contribute to the long-term development and stability of zero-emissions propulsion market. In parallel, the MTA is engaging with established manufacturers abroad whose more mature ZEB manufacturing capabilities have produced lower cost, more reliable vehicles. The scale of the MTA's fleet makes it an attractive partner and may help encourage these manufacturers to enter the U.S. market. See April 25, 2022, MTA Board Presentation at 1:21:09: <https://www.mta.info/transparency/board-and-committee-meetings/april-2022>

OSC Recommendation #4: Establish clear, measurable prioritization criteria and implement monitoring controls to ensure outcomes consistently align with stated priorities.

MTA's Response: The MTA acknowledges this recommendation. The MTA has already established a multicriteria framework that incorporates environmental justice, borough distribution, operational feasibility, power availability, construction sequencing, route suitability, and facility readiness considerations.

State Comptroller's Comment – MTA's response is the same as its response to our preliminary audit findings dated January 7, 2026. However, the MTA did not provide any documentation to support their statement—then or now. As we have consistently communicated to the MTA, repeated oral assertions that supporting documentation exists, without providing it, does not constitute sufficient, appropriate audit evidence.

These objectives must be balanced against real world operational and infrastructure constraints, such as utility service limitations, construction phasing requirements, fleet availability challenges, and depot readiness, to avoid service impacts or implementation delays.

OSC Recommendation #5: Continue to work with the Office of System Safety and FDNY to develop formal procedures for facility emergency response, fire suppression systems, and fire safety plans.

MTA's Response: The MTA agrees with this recommendation and has already increased coordination efforts among the Department of Buses, Office of System Safety, and FDNY. Efforts include refinement of thermal event response protocols, fire isolation procedures, emergency preparedness planning, facility risk mitigation, battery monitoring protocols, isolation procedures, and employee awareness initiatives. The MTA recognizes that lithium-ion battery technology and large-scale BEBs fire mitigation continue to evolve nationally, and the MTA remains engaged in identifying emerging best practices in and lessons learned from peers and safety experts alike.

OSC Recommendation #6: Ensure that all guidance for fire safety regarding ZEBs is disseminated to all personnel, depots, and emergency responders.

MTA's Response: The MTA agrees with this recommendation. Guidance on fire safety for ZEBs has been disseminated through multiple channels. Maintenance Directives (MD) and Permanent Bulletins (PB), including MD 60-145-20, MD 60-185-23, and PB 01.22.06, PB 03.80.01, are posted on the company intranet for easy access by Bus personnel. These bulletins were previously redistributed to depot personnel with BEBs as a reminder.

OSC Recommendation #7: Provide all bus operators and maintainers with the required training.

MTA's Response: The MTA acknowledges this recommendation. Bus operators assigned to depots operating electric buses receive vehicle specific training, including hands-on electric bus familiarization, before they are permitted to operate the bus to ensure safe and effective operation. Newly hired maintenance employees (Helpers and above) also receive high voltage awareness training as part of their core onboarding, with the goal of ensuring that all maintenance staff at depots with BEBs are appropriately trained. Existing maintenance employees at depots that have high-voltage systems have also been trained. As the BEB fleet expands, training for both operators and maintenance staff will be scaled accordingly to ensure all personnel remain fully prepared to support the growing fleet.

OSC Recommendation #8: Develop a uniform system for preparing, maintaining, and retaining training documentation.

MTA's Response: The MTA acknowledges this recommendation. The MTA recognizes the value of standardizing documentation responsibilities and retention protocols; therefore, a structured process is currently in place to track training status of both bus operators and maintainers. Training completions for both operators and maintainers are recorded in the UTS system, the official system of record.

Sincerely,



Demetrius Crichlow
President
New York City Transit



Contact

Office of the New York State Comptroller
110 State Street
Albany, New York 12236

(518) 474-4044

www.osc.ny.gov

Prepared by the Division of State Government Accountability

Executive Team

Andrea C. Miller – Executive Deputy Comptroller
Tina Kim – Deputy Comptroller
Stephen C. Lynch – Assistant Comptroller

Audit Team

Carmen Maldonado – Audit Director
Robert Mehrhoff – Audit Manager
Anthony Belgrave – Audit Supervisor
Elijah Kim – Examiner-in-Charge
Danielle Marciano – Examiner-in-Charge
Kyle Yuen – Examiner-in-Charge
Fiona Fay – Senior Examiner
Lexi Holness – Senior Examiner
Hadassah Leiva – Senior Examiner
Julissa Alonzo – Staff Examiner
Andrea Majot – Supervising Editor



FOLLOW US: osc.ny.gov/subscribe